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UTILITY **PATENT APPLICATION TRANSMITTAL**

960296.00050 Attorney Docket No. Tenneille E. Ludwig First Inventor Physiochemical Culture Conditions for Embryo

ER 379231514 US

(Only for new nonprovisional applications under 37 CFR 1.53(b))

	ATION ELEMENTS	nte	ADDRE	SS TO: P.O	nmissione . Box 145	0	
1. Fee Transmittal F (Submit an original and a Applicant claims a See 37 CFR 1.27 3. Specification (preferred arrangemet - Descriptive title - Cross Reference - Statement Reg - Reference to s or a computer - Background of - Brief Summary	[Total Pages 10] at set forth below) to of the invention better to Related Applications parding Fed sponsored R & D requence listing, a table, program listing appendix the Invention of the Drawings (If filed)	nts.	8. Nucleotic (if applic a	D-ROM or CD-R is omputer Program de and/or Amino Acable, all necessar Computer Readabification Sequence CD-ROM open paper Statements verifys OMPANYING	(Appendicid Sequency) ble Form (Listing of the Corr CD-R (2) ing identite APPLIC s (cover sequence)	e, larga x) ence S CRF) n: 2 copie y of ab	e table or submission es); or sove copies DN PARTS document(s))
- Abstract of the 4. Drawing(s) (35 to 15. Oath or Declaration a. Newly exect Copy from a for continuation of the continuati	4		10.	37 CFR 3.73(b) St (when there is an in- English Translation Information Disclo- Statement (IDS)/P Preliminary Amen- Return Receipt Po (Should be specific Certified Copy of I (if foreign priority if Nonpublication Re (b)(2)(B)(i). Applic or its equivalent. Other:	assignee) n Docume sure TO-1449 dment ostcard (N cally item Priority Do s claimed equest un ant must	PEP 5 ized) ocumen) der 35 attach	Copies of IDS Citations 503) nt(s) U.S.C. 122 form PTO/SB/35
specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Of prior application No.: Prior application information: Examiner Ant Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS							
Customer Number	26734			or	Correspon	dence a	ddress below
Name	Sara D. Vinarov						
	Quarles & Brady LLP						
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Country	US Telephone 608/251-5000 Fax 608/25			608/251-9166			
Name (Print/Type)	Sara D. Vinarov		Registrati	ion No. (Attorne			24 ch 26, 2004
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Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

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Complete if Known			
Application Number			
Filing Date			
First Named Inventor	Tenneille E. Ludwig		
Examiner Name			
Art Unit	·		
Attorney Docket No.	960296.00050		

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None	3. ADDITIONAL FEES					
Deposit Account:	Large Entity Small Entity					
Denosit	Fee Fee Fee Fee Fee Description	Ess Dalid				
Account Number 17-0055	1051 130 2051 65 Surcharge - late filing fee or oath	Fee Paid				
Deposit Overlag & Product D	1052 50 2052 25 Surcharge - late provisional filing fee or					
Account Name Quaries & Brady LLP	cover sheet					
The Director is authorized to: (check all that apply)	1053 130 1053 130 Non-English specification	_				
Charge fee(s) indicated below Credit any overpayments	1812 2,520 1812 2,520 For filing a request for ex parte reexamination	n l				
Charge any additional fee(s) or any underpayment of fee(s)	1804 920* 1804 920* Requesting publication of SIR prior to Examiner action					
Charge fee(s) indicated below, except for the filing fee	1805 1,840* 1805 1,840* Requesting publication of SIR after					
to the above-identified deposit account.	Examiner action 1251 110 2251 55 Extension for reply within first month					
FEE CALCULATION	1251 110 2251 55 Extension for reply within first month 1252 420 2252 210 Extension for reply within second month	1				
1. BASIC FILING FEE	1253 950 2253 475 Extension for reply within third month					
Large Entity Small Entity Fee Fee Fee Fee Description Fee Paid						
Code (\$) Code (\$)						
1001 770 2001 385 Utility filing fee 770						
1002 340 2002 170 Design filing fee	1401 330 2401 165 Notice of Appeal					
1003 530 2003 265 Plant filing fee	1402 330 2402 165 Filing a brief in support of an appeal					
1004 770 2004 385 Reissue filing fee	1403 290 2403 145 Request for oral hearing					
1005 160 2005 80 Provisional filing fee	1451 1,510 1451 1,510 Petition to institute a public use proceeding 1452 110 2452 55 Petition to revive - unavoidable	 				
SUBTOTAL (1) (\$) 770.00						
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453 1,330 2453 665 Petition to revive - unintentional					
Fee from Extra Claims below Fee Paid	1501 1,330 2501 665 Utility issue fee (or reissue) 1502 480 2502 240 Design issue fee					
Total Claims 11 -20* = 0 X = 0.00	1503 640 2503 320 Plant issue fee	—				
Independent 6 -3** = 3 x 86 = 258.00	1460 130 1460 130 Petitions to the Commissioner					
Multiple Dependent =	1807 50 1807 50 Processing fee under 37 CFR 1.17(g)					
Large Entity Small Entity	1806 180 1806 180 Submission of Information Disclosure Stmt					
Fee Fee Fee <u>Fee Description</u> Code (\$) Code (\$)	8021 40 8021 40 Recording each patent assignment per					
1202 18 2202 9 Claims in excess of 20	property (times number of properties)					
1201 86 2201 43 Independent claims in excess of 3	1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a))	1 1				
1203 290 2203 145 Multiple dependent claim, if not paid	1810 770 2810 385 For each additional invention to be					
1204 86 2204 43 ** Reissue independent claims over original patent	examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE					
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802 900 1802 900 Request for expedited examination of a design application					
	Other fee (specify)					
SUBTOTAL (2) (\$\) 258.00 **or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.0	00				

SUBMITTED BY (Complete (if applicable))						
Name (Print/Type)	Sara D. Vinarov	Registration No. (Attorney/Agent)	48,524	Telephone	608/251-5000	
Signature				Date	March 26, 2004	

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One South Pinckney Street Post Office Box 2113 Madison, Wisconsin 53701-2113 Tel 608.251.5000 Fax 608.251.9166 www.quarles.com Attorneys at Law in: Pboenix and Tucson, Arizona Naples and Boca Raton, Florida Chicago, Illinois (Quarles & Brady LLC) Milwaukee and Madison, Wisconsin

March 26, 2004

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Re: Filing Patent Application

Dear Sir:

Enclosed for filing please find a patent application entitled:

PHYSIOCHEMICAL CULTURE CONDITIONS FOR EMBRYONIC STEM CELLS

by Tenneille E. Ludwig James A. Thomson

The undersigned hereby certifies that this document is being deposited with the United States Postal Service today, March 26, 2004, by the "Express Mail" service, utilizing Express Mail label number ER379231514US, addressed to: Mail Stop Patent Application, Commissioner for Patents, P O Box 1450, Arlington, VA 22313-1450.

Please indicate receipt of this application by returning the attached postcard with the official Patent and Trademark Office receipt and serial number stamped thereon.

Respectfully submitted,

Enclosures

QBMAD\373785.1